
The Health Hazards of Burning Leaves

Wisconsin Department of Natural Resources



Now that the state recycling law prohibits sending yard waste to landfills, people need to know how they can manage yard waste, including leaves and

brush. If you are wondering whether open burning is an environmentally sound way to dispose of leaves and plant clippings at your home, the answer is **NO!** State law currently allows people to burn *small* amounts of dry leaves and brush on their own property so long as leaf burning is not prohibited by local ordinances. However, *you should try to avoid burning leaves whenever possible.*

The smoke generated by a large number of simultaneous leaf fires may be a health concern, especially for people downwind. Leaf smoke can irritate the eyes, nose and throat of healthy adults. But it can be much more harmful to small children, the elderly, and people with asthma or other lung or heart diseases. This is because the visible smoke from leaf fires is made up almost entirely of tiny particles that can reach deep into lung tissue and cause symptoms such as coughing, wheezing, chest pain and shortness of breath--symptoms that might not occur until several days after exposure to large amounts of leaf smoke.

Besides being an irritant, leaf smoke contains many hazardous chemicals, including carbon monoxide and benzo(a)pyrene. Carbon monoxide binds with hemoglobin in the bloodstream and thus reduces the amount of oxygen in the blood and lungs. So carbon monoxide can be very dangerous for young children with immature lungs, smokers, the elderly, and people with chronic heart or lung diseases. Benzo(a)pyrene is

known to cause cancer in animals and is believed to be a major factor in lung cancer caused by cigarette smoke. It is found in cigarette smoke and coal tar as well as leaf smoke.

According to U.S. Environmental Protection Agency studies, sometimes concentrations of air pollutants resulting from leaf burning can be so high that the air does not meet federal health standards. In fact, in some areas burning of leaves and brush sometimes causes much higher levels of air pollution than all other forms of air pollution combined (such as factories, vehicles, and lawn and garden equipment).

Leaf burning can also reduce visibility, create safety hazards, cause a nuisance, soil buildings and other property, and create additional demands on local police and fire protection.

Even though leaf burning may be legal in many localities, it is not a good way to dispose of fallen leaves. Instead of burning your leaves, you can:

- **Compost** leaves and plant clippings. You can reduce the volume of leaves significantly by shredding them before composting.
- **Chip** brush and clean wood to make mulch or decorative chips.
- **Use municipal collection services** if available, or ask your local municipality to offer such a service or a drop-off center.